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THE REA LINEMAN

RURAL ELECTRIFICATION ADMINISTRATION

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Tennessee Foremen Discuss Leadership Problems

Two Questions Result In Helpful Talks

At a recent Training Conference for Tennessee foremen, Dan M. Jones, District Supervisor of Trade and Industrial Education, presented two questions to the conference for solution by discussion:

"1. Why should an REA foreman study his duties and responsibilities?

2. What are some duties and/or responsibilities of an REA foreman?"

The discussion which followed brought out the following points:

Why should an REA foreman study his duties and responsibilities?

1. To help him 'pick out' or 'spot' those details or his job which have been neglected or need attention.
2. To help him get an over-all picture of his total job.
3. To assist him in conserving manpower and equipment.
4. To help him balance his time and effort among his responsibilities.
5. To help him determine those responsibilities that might be delegated to someone else.
6. To get work done efficiently and

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Co-op Lineman Dies Installing Transformer

Crew Fails In Attempt To Resuscitate

A line crew was engaged in moving a single-phase line so that the road along which it ran could be widened. This line was a main line several miles long. A new line was being built alongside the old line, to prevent a long outage over an extensive area.

The new line was complete except for one transformer installation and a few little jobs. Ordinarily, this transformer installation would have been built before the line was energized. However, the contractor grading the road was impatiently waiting for the old poles to be removed.

The line crew had worked till noon making the change-over, and came back after lunch to build the transformer installation on the new line which was then energized. It was to be a conventional transformer installation. A lineman went up the pole and installed the cross-arm, cutout and arresters. The jumper leads were attached to the top of the arrester and cutout and were rolled up. The lineman was belted off at the neutral with his belt over the neutral on one side of the pole and under the neutral on the other side. The groundman was at the base of the pole tying the secondary clevises on the hand line. The foreman and other lineman were stringing out the service wires from the house to the transformer pole. At this time the manager arrived. He talked about the job with the foreman. They were standing about 40 feet from the pole.

(Conclusion and Diagram on Page 4)

BALANCE YOUR JOB TRAINING

- Editorial -

I. T. McKillop, REA industrial engineer, addressed the workshop conference of job-training supervisors in Washington recently on evaluating the training program from the standpoint of an industrial engineer. Mr. McKillop said:

"Any evaluation brings to mind the old-fashioned balance scale with two platforms. On one side of the scale is something to be tested while on the other side of the scale is the standard to be used in the test. The standard for any program or job carried on within the Rural Electrification Administration, stated in a few simple words, is, 'To what extent will this activity aid in bringing the benefits of electricity to rural people?' This is the broad standard for the measurement of job training. As we become more specific and relate our discussion to a certain cooperative, the standard again takes on a ringing repetition, 'Will this program help more rural people to obtain the benefits of electricity due to an effective use of all our resources?' And finally, for a more detailed standard, if we apply this question to an individual farm, the standard remains, 'To what extent will this program help the rural home improve its standard of living through the use of electricity?' This training program, in order to meet the requirements set up on one side of the balance, must fulfill all of these requirements."

The job training program is making a higher standard of rural living on the farm. It is bringing the full benefit of electricity to rural people. There is no substitute for skilled workmen doing a workmanlike job in a safe and efficient manner. The fact that the job training program is accomplishing these purposes is one reason why it has become so popular on the systems of REA borrowers.

MANY ACCIDENTS ARE AVOIDABLE

by D. B. Bidle,
Illinois Safety and Job Training Instructor

A few days ago I attended the funeral of a friend whose death was caused by electric shock. When a lineman is killed, we say, "He must have been careless, or he didn't know what he was doing. It will never happen to me because I'm careful. I know what I'm doing, I never take chances." Yet every year about 130 linemen in the United States meet their death by electric shock.

These deaths need not occur. Human lives need not be sacrificed to bring the benefits of electric service to the millions who now enjoy it. The use of rubber gloves would reduce the number of such deaths considerably, because about 80 percent of the contacts with hot lines are made with the hands.

No Rubber Gloves

My friend was not careless; he didn't take chances intentionally, but he made an accidental contact with a high voltage wire when he wasn't wearing his rubber gloves. They were in the glove bag attached to his belt. Just why he didn't have them on will never be known, but we do know that the habit of not wearing them at all times while on a pole carrying energized lines cost him his life.

If we strung up four wires, one of which was sure to kill and the other three to injure and possibly kill, we could not induce any lineman to take his choice and touch one of them with his bare hands. But that is virtually what all linemen are doing when they work near enough to high voltage wires to contact them accidentally. Statistics show that one in every four contacts with high voltage wires is fatal.

We are not training the young lineman properly. We take it for granted that he will use gloves when his judgment tells him

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These Accidents Happened In October

Employee was trimming trees. The platform was about twelve feet above the ground. The cable hook came unhooked from the ring supporting the boom, and the platform fell to the ground. Employee received a spinal fracture and broken bone in foot.

Employee was stringing wire. The third finger on his left hand became wedged between the wire and pay out wire reel, severing the first joint.

Employee was helping other employees to remove 45' pole from a hole, using a winch truck and derrick. As the butt of the pole cleared the hole, the men discovered that the top of the pole was too heavy. It fell to the ground, causing the butt of the pole to ascend, throwing employee into the air. Employee injured his ankle as he hit the ground.

Employee was moving some line hardware with a two-wheel truck when he lost his balance. The loaded truck fell on him. One knee was bruised and sprained.

Groundman opened door of truck to get tools and axe fell out of truck, hitting his left foot and cutting a vein.

Employee on pole stretched out to refuse three-shot. His spurs cut out of pole, and he fell about 23 feet, spraining his back and shoulder.

Lineman and helper were installing a primary deadend (A-5 unit) on a pole in the existing line, preparing a take-off for a part of new line. The accident occurred on a pole at the end of the existing line. On the pole were a transformer, lightning arrester and cutout. The lineman pulled the cutout, de-energizing the transformer and proceeded to install the suspension insulators for the new line. He had his left foot on the lower bracket of the transformer and

had been using his left hand to turn the nut on the eyebolt. He then started to use his right hand to finish turning on the nut. The jumper from the line to the cutout was still hot, and the lineman touched the hot jumper with his forearm above the rubber gloves, the energy passing from his right forearm to his left foot on the transformer bracket. The result was severe burns on his right forearm and left foot.

A tree was being felled. It struck another tree. Part of the second tree struck an employee in the back.

Employee was working on the line as a helper. A six pound wire grip fell from the top of the pole and struck him in the mouth. His upper lip was cut and his upper plate broken.

Lineman was working on a 45' pole. He must have climbed higher than he realized. His head touched the energized 7200-volt line. He may have grabbed the hot wire when he received the first shock on his head because his right hand was also severely burned. The fuse blew out at the substation and his body fell over the neutral wire. The foreman, on the job nearby, climbed the pole immediately and carried him down. The doctor was called, the lineman was rushed to a hospital and four days later his right hand was amputated. He had severe burns on head, right hand, upper left arm and under left arm. Flash burns were on upper part of body and face.

Lineman was belting off on a pole when his hooks chipped out. He fell to the ground, injuring his back and shoulder.

Employee was climbing down from the coupling of a railroad car while unloading poles. He slipped on a wet coupling and fell to the ground, hitting his spine on a railroad tie. Base of spine was injured.

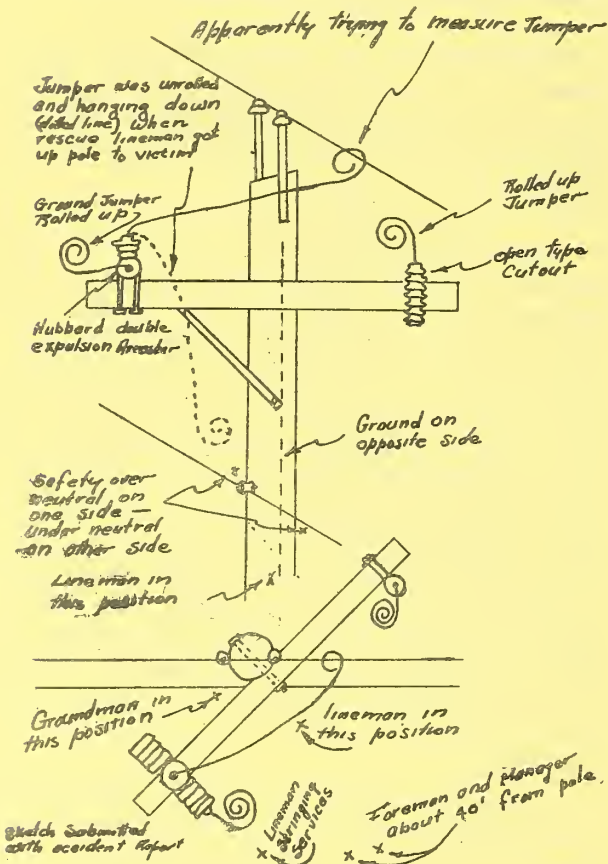
Remember To Be Careful In December

Transformer Accidents (continued)

None of these men was looking up at the time the accident occurred. The groundman heard an arcing noise and looked up as the injured man cried out and slumped in his belt. The foreman and the second lineman on the ground rushed up the pole and gave pole-top resuscitation for a few minutes. Then they lowered the victim to the ground, where prone pressure resuscitation was continued. Two doctors were summoned. An inhalator was brought out from the fire department and used along with artificial respiration. The

crew worked two hours and forty minutes but were unable to resuscitate the lineman. The burns were very slight.

What actually happened no one can definitely say. It is apparent, however, that the lineman was measuring the jumper wire from the top of the arrester to the conductor and either contacted the conductor with this jumper or got it too close to the conductor, resulting in an arc. The lineman did not have on gloves at the time of the accident. This indicates that he had forgotten that the line was now hot. Until now the men had been working on a dead line, the new line having been energized that noon.



Accidents Avoidable (continued)

to. Get him to form the habit of wearing rubber gloves all the time on poles carrying energized circuits. It may prevent another death.

If we hope to prevent needless waste of human life, we must either stay so far away from energized lines that we cannot contact them or we must protect ourselves the best way we know how when we do contact them.

Let's train the young lineman and re-train the older ones. Gloves on your hands may save your life. They certainly won't do any good in the truck or in the glove bag.

--From "The Safety Exchange," October 1946, Univ. of Illinois, College of Agriculture.

Tennessee Foremen (continued)

safely.

7. To establish good team work (job morale).
8. To help him establish good public relations."

These points served as a fine introduction to the main question:

What are some duties and/or responsibilities of an REA foreman?

The Lineman will continue this discussion in its next issue.

**MAKE IT A HABIT
TO WEAR RUBBER GLOVES**

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David A. Fleming, Editor